



SEQUENCE LISTING

<110> Anderson, Christen M.
Davis, Robert E.
Clevenger, William
Wiley, Sandra Eileen
Willer, Scott W.
Szabo, Tomas R.
Ghosh, Soumitra S.
Moos, Walter H.
Pei, Yazhong

<120> PRODUCTION OF ADENINE NUCLEOTIDE TRANSLOCATOR (ANT),
NOVEL ANT LIGANDS AND SCREENING ASSAYS THEREFOR

<130> 660088.420C1

<140> US 09/393,441

<141> 1999-09-08

<160> 37

<170> FastSEQ for Windows Version 3.0

<210> 1

<211> 894

<212> DNA

<213> Homo sapien

<400> 1

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gccagcaaac	agatcagtcg	tgagaagcag	tacaaaggga	tcattgattg	tgtggtgaga	180
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tacttcccca	cccaagctct	caacttcgcc	ttcaaggaca	agtacaagca	gctcttctta	300
gggggtgtgg	atcggcataa	gcagttcttg	cgctactttg	ctggtaacct	ggcgccggt	360
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atcaagatct	tcaagtctga	tggcctgagg	gggctctacc	agggtttcaa	cgtctctgtc	540
caaggcatca	ttatctatag	agctgcctac	ttcggagtct	atgatactgc	caaggggatg	600
ctgcctgacc	ccaagaacgt	gcacattttt	gtgagctgga	tgattgcccc	gagtggtgacg	660
gcagtcgcag	ggctgctgtc	ctaccccttt	gacactgttc	gtcgtagaat	gatgatgcag	720
tccggccgga	aaggggccga	tattatgtac	acggggacag	ttgactgctg	gaggaagatt	780
gcaaaagacg	aaggagccaa	ggccttcttc	aaaggtgcct	ggccaatgt	gctgagaggc	840
atgggcggtg	cttttgtatt	ggtgttgtat	gatgagatca	aaaaatatgt	ctaa	894

<210> 2

<211> 897

<212> DNA

<213> Homo sapien

<400> 2

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gccagcaagc	agatcactgc	agataagcaa	tacaaaggca	ttatagactg	cgtgggtccgt	180
attcccaagg	agcaggaagt	tctgtccttc	tggcgcggtg	acctggccaa	tgtcatcaga	240
tacttcccca	cccaggctct	taacttcgcc	ttcaaagata	aatacaagca	gatcttcctg	300
ggtggtgtgg	acaagagAAC	ccagttttgg	cgctactttg	cagggaatct	ggcatcgggt	360
ggtgccgcag	gggccacatc	cctgtgtttt	gtgtaccctc	ttgattttgc	ccgtaccctg	420
ctagcagctg	atgtgggtaa	agctggagct	gaaagggaat	tccgaggcct	cggtgactgc	480
ctgggttaaga	tctacaaatc	tgatgggatt	aagggcctgt	accaaggctt	taacgtgtct	540
gtgcagggtg	ttatcatcta	ccgagccgcc	tacttcggta	tctatgacac	tgcaaaggga	600
atgcttcctg	atcccaagaa	cactcacatc	gtcatcagct	ggatgatcgc	acagactgtc	660
actgctgttg	ccgggttgac	ttcctatcca	tttgacaccg	ttcgccgcgc	catgatgatg	720
cagtcagggc	gcaaaggAAC	tgacatcatg	tacacaggca	cgcttgactg	ctggcggaag	780
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<210> 3

<211> 897

<212> DNA

<213> Homo sapien

<400> 3

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gccagcaagc	agatcgccgc	cgacaagcag	tacaagggca	tcgtggactg	cattgtccgc	480
atccccaagg	agcagggcgt	gctgtccttc	tggaggggca	accttgccaa	cgctattcgc	540
tacttcccca	ctcaagccct	caacttcgcc	ttcaaggata	agtacaagca	gatcttcttg	600
gggggcgtgg	acaagcacac	gcagttctgg	aggtactttg	cgggcaacct	ggcctccggc	660
ggtgcgccc	gcgcgacctc	cctctgcttc	gtgtaccctc	tggattttgc	cagaacctgc	720
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atgctccccg	accccaagaa	cacgcacatc	gtggtgagct	ggatgatcgc	gcagaccgtg	960
acggcctgtg	ccggcgtggg	gtcctaacc	ttcgacacgg	tgccgcggcg	catgatgatg	1020
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atcttcagag	atgagggggg	caaggccttc	ttcaagggtg	cgtggtccaa	cgtcctgcgg	1140
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<210> 4

<211> 43

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR Primer

<400> 4

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43

<210> 5

<211> 43

<212> DNA

<213> Artificial Sequence

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<223> PCR Primer

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43

<210> 6
<211> 43
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 6
ttatatctcg agtatgacag atgccgctgt gtccttcgcc aag

43

<210> 7
<211> 43
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<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 7
tatataggta ccttatgtgt acttcttgat ttcacatac aag

43

<210> 8
<211> 43
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 8
ttatatctcg agtatgacgg aacaggccat ctccttcgcc aaa

43

<210> 9
<211> 44
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 9
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44

<210> 10
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Sequence primer

<400> 10
tatgccatag catttttatc c 21

<210> 11
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Sequence primer

<400> 11
cgccaaaaca gccaaagct 18

<210> 12
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Mutagenic oligonucleotide primer

<400> 12
ggagatggcc tgttcgctca tcttatcgtc atcgtcgtac agatc 45

<210> 13
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Mutagenic oligonucleotide primer

<400> 13
gatctgtacg acgatgacga taagatgacg gaacaggcca tctcc 45

<210> 14
<211> 35
<212> DNA
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<220>
<223> PCR primer

<400> 14
cccggggaat tctgatgacg gaacaggcca tctcc 35

<210> 15
<211> 34
<212> DNA
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<220>
<223> PCR primer

<400> 15
 cccgggctcg agttagagtc accttcttga gctc 34

 <210> 16
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 <220>
 <223> PCR primer

 <400> 16
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 <210> 17
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 <400> 17
 ttaaagaatt cttagatcac cttcttgagc tcgtcgta g 41

 <210> 18
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 <212> DNA
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 <220>
 <223> Sequencing primer

 <400> 18
 aaatgataac catctcgc 18

 <210> 19
 <211> 18
 <212> DNA
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 <220>
 <223> Sequencing primer

 <400> 19
 acttcaagga gaatttcc 18

 <210> 20
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 <223> Sequencing primer

<400> 20
acttcgcctt cacggata . 18

<210> 21
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<212> DNA
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<400> 21
tacggccaag ggcattct 18

<210> 22
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<220>
<223> Sequencing primer

<400> 22
tgaagcggaa gttcctat 18

<210> 23
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<212> DNA
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<220>
<223> Sequencing primer

<400> 23
atgccggttc ccgtacga 18

<210> 24
<211> 31
<212> DNA
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<223> Mutagenic oligonucleotide primer

<400> 24
ggcctgttcc gtcatttat cgtcatcgtc g 31

<210> 25
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Mutagenic oligonucleotide primer

<400> 25
cgacgatgac gataagatga cggaacaggc c 31

<210> 26
<211> 41
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 26
ttaaagaatt catgacggaa caggccatct ccttcgcaa a 41

<210> 27
<211> 41
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 27
ttataggatc cttagatcac cttcttgagc tcgtcgtaca g 41

<210> 28
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 28
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<210> 29
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 29
ttatactcga gttagatcac cttcttgagc tcgtcgtaca gg 42

<210> 30
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic polypeptide

<400> 30
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 1 5 10 15

<210> 31
 <211> 297
 <212> PRT
 <213> Homo sapien

<400> 31
 Met Gly Asp His Ala Trp Ser Phe Leu Lys Asp Phe Leu Ala Gly Ala
 1 5 10 15
 Val Ala Ala Ala Val Ser Lys Thr Ala Val Ala Pro Ile Glu Arg Val
 20 25 30
 Lys Leu Leu Leu Gln Val Gln His Ala Ser Lys Gln Ile Ser Ala Glu
 35 40 45
 Lys Gln Tyr Lys Gly Ile Ile Asp Cys Val Val Arg Ile Pro Lys Glu
 50 55 60
 Gln Gly Phe Leu Ser Phe Trp Arg Gly Asn Leu Ala Asn Val Ile Arg
 65 70 75 80
 Tyr Phe Pro Thr Gln Ala Leu Asn Phe Ala Phe Lys Asp Lys Tyr Lys
 85 90 95
 Gln Leu Phe Leu Gly Gly Val Asp Arg His Lys Gln Phe Trp Arg Tyr
 100 105 110
 Phe Ala Gly Asn Leu Ala Ser Gly Gly Ala Ala Gly Ala Thr Ser Leu
 115 120 125
 Cys Phe Val Tyr Pro Leu Asp Phe Ala Arg Thr Arg Leu Ala Ala Asp
 130 135 140
 Val Gly Arg Arg Ala Gln Arg Glu Phe His Gly Leu Gly Asp Cys Ile
 145 150 155 160
 Ile Lys Ile Phe Lys Ser Asp Gly Leu Arg Gly Leu Tyr Gln Gly Phe
 165 170 175
 Asn Val Ser Val Gln Gly Ile Ile Ile Tyr Arg Ala Ala Tyr Phe Gly
 180 185 190
 Val Tyr Asp Thr Ala Lys Gly Met Leu Pro Asp Pro Lys Asn Val His
 195 200 205
 Ile Phe Val Ser Trp Met Ile Ala Gln Ser Val Thr Ala Val Ala Gly
 210 215 220
 Leu Leu Ser Tyr Pro Phe Asp Thr Val Arg Arg Arg Met Met Met Gln
 225 230 235 240
 Ser Gly Arg Lys Gly Ala Asp Ile Met Tyr Thr Gly Thr Val Asp Cys
 245 250 255
 Trp Arg Lys Ile Ala Lys Asp Glu Gly Ala Lys Ala Phe Phe Lys Gly
 260 265 270
 Ala Trp Ser Asn Val Leu Arg Gly Met Gly Gly Ala Phe Val Leu Val
 275 280 285
 Leu Tyr Asp Glu Ile Lys Lys Tyr Val
 290 295

<210> 32
 <211> 298
 <212> PRT
 <213> Homo sapien

<400> 32


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Met Thr Asp Ala Ala Leu Ser Phe Ala Lys Asp Phe Leu Ala Gly Gly
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      20      25      30
Lys Leu Leu Leu Gln Val Gln His Ala Ser Lys Gln Ile Thr Ala Asp
      35      40      45
Lys Gln Tyr Lys Gly Ile Ile Asp Cys Val Val Arg Ile Pro Lys Glu
      50      55      60
Gln Glu Val Leu Ser Phe Trp Arg Gly Asn Leu Ala Asn Val Ile Arg
65      70      75      80
Tyr Phe Pro Thr Gln Ala Leu Asn Phe Ala Phe Lys Asp Lys Tyr Lys
      85      90      95
Gln Ile Phe Leu Gly Gly Val Asp Lys Arg Thr Gln Phe Trp Arg Tyr
      100      105      110
Phe Ala Gly Asn Leu Ala Ser Gly Gly Ala Ala Gly Ala Thr Ser Leu
      115      120      125
Cys Phe Val Tyr Pro Leu Asp Phe Ala Arg Thr Arg Leu Ala Ala Asp
      130      135      140
Val Gly Lys Ala Gly Ala Glu Arg Glu Phe Arg Gly Leu Gly Asp Cys
145      150      155      160
Leu Val Lys Ile Tyr Lys Ser Asp Gly Ile Lys Gly Leu Tyr Gln Gly
      165      170      175
Phe Asn Val Ser Val Gln Gly Ile Ile Ile Tyr Arg Ala Ala Tyr Phe
      180      185      190
Gly Ile Tyr Asp Thr Ala Lys Gly Met Leu Pro Asp Pro Lys Asn Thr
      195      200      205
His Ile Val Ile Ser Trp Met Ile Ala Gln Thr Val Thr Ala Val Ala
      210      215      220
Gly Leu Thr Ser Tyr Pro Phe Asp Thr Val Arg Arg Arg Met Met Met
225      230      235      240
Gln Ser Gly Arg Lys Gly Thr Asp Ile Met Tyr Thr Gly Thr Leu Asp
      245      250      255
Cys Trp Arg Lys Ile Ala Arg Asp Glu Gly Gly Lys Ala Phe Phe Lys
      260      265      270
Gly Ala Trp Ser Asn Val Leu Arg Gly Met Gly Gly Ala Phe Val Leu
      275      280      285
Val Leu Tyr Asp Glu Ile Lys Lys Tyr Thr
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<210> 33
<211> 298
<212> PRT
<213> Homo sapien

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<400> 33
Met Thr Glu Gln Ala Ile Ser Phe Ala Lys Asp Phe Leu Ala Gly Gly
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Ile Ala Ala Ala Ile Ser Lys Thr Ala Val Ala Pro Ile Glu Arg Val
      20      25      30
Lys Leu Leu Leu Gln Val Gln His Ala Ser Lys Gln Ile Ala Ala Asp
      35      40      45
Lys Gln Tyr Lys Gly Ile Val Asp Cys Ile Val Arg Ile Pro Lys Glu
      50      55      60
Gln Gly Val Leu Ser Phe Trp Arg Gly Asn Leu Ala Asn Val Ile Arg
65      70      75      80

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Tyr Phe Pro Thr Gln Ala Leu Asn Phe Ala Phe Lys Asp Lys Tyr Lys
 85 90 95
 Gln Ile Phe Leu Gly Gly Val Asp Lys His Thr Gln Phe Trp Arg Tyr
 100 105 110
 Phe Ala Gly Asn Leu Ala Ser Gly Gly Ala Ala Gly Ala Thr Ser Leu
 115 120 125
 Cys Phe Val Tyr Pro Leu Asp Phe Ala Arg Thr Arg Leu Ala Ala Asp
 130 135 140
 Val Gly Lys Ser Gly Thr Glu Arg Glu Phe Arg Gly Leu Gly Asp Cys
 145 150 155 160
 Leu Val Lys Ile Thr Lys Ser Asp Gly Ile Arg Gly Leu Tyr Gln Gly
 165 170 175
 Phe Ser Val Ser Val Gln Gly Ile Ile Ile Tyr Arg Ala Ala Tyr Phe
 180 185 190
 Gly Val Tyr Asp Thr Ala Lys Gly Met Leu Pro Asp Pro Lys Asn Thr
 195 200 205
 His Ile Val Val Ser Trp Met Ile Ala Gln Thr Val Thr Ala Val Ala
 210 215 220
 Gly Val Val Ser Tyr Pro Phe Asp Thr Val Arg Arg Arg Met Met Met
 225 230 235 240
 Gln Ser Gly Arg Lys Gly Ala Asp Ile Met Tyr Thr Gly Thr Val Asp
 245 250 255
 Cys Trp Arg Lys Ile Phe Arg Asp Glu Gly Gly Lys Ala Phe Phe Lys
 260 265 270
 Gly Ala Trp Ser Asn Val Leu Arg Gly Met Gly Gly Ala Phe Val Leu
 275 280 285
 Val Leu Tyr Asp Glu Leu Lys Lys Val Ile
 290 295

<210> 34
 <211> 41
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer for PCR amplification of human ANT3 for
 expression construct

<400> 34
 ttaatggtac catgacggaa caggccatct ccttcgccaa a

41

<210> 35
 <211> 42
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer for PCR amplification of human ANT3 for
 expression construct

<400> 35
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42

<210> 36

<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for PCR amplification of EYFP

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<210> 37
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for PCR amplification of EYFP

<400> 37
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33